Mr. Leroy T. Harrell Essex Group, Inc. 190 East Polk Street Orleans, Indiana 47452

Re: 117-11532-00013

Third Administrative Amendment to

Part 70 117-6923-00013

#### Dear Mr. Harrell:

Essex Group, Inc. was issued a permit on February 9, 1999 for a PVC primary wire, thermoset primary wire, ignition wire, battery cable and machine tool wire manufacturing facility. On September 17, 1999, requests were received to add an insignificant emission unit to the Continuous Vulcanization Department, to change the facility description for the PVC Extrusion Department and the Continuous Vulcanization Extrusion Department, and to move the two operations from the significant activities list in Section A.2 to the Insignificant Activities list in Section A.3. An Administrative Amendment, 117-11349-00013, was issued on October 28, 1999 granting these requests.

Upon review of Administrative Amendment 117-11349-00013, typographical errors were discovered in the descriptions in Sections A.2 and A.3 and in Sections D.2 and D.3. Pursuant to the provisions of 2-7-11 the permit is hereby administratively amended to correct the typographical errors as follows:

- (1) The emission unit description in Section A.2 is revised to incorporate the permit change made in 117-11109-00013 as follows:
  - One (1) natural gas fired boiler rated at 21.2 MMBtu per hour of heat input, identified as emission unit CB 1 and one (1) natural gas fired boiler rated at 10 MMBtu per hour of heat input, identified as emission unit Clay-S.
- (2) The emission unit description in Section A.3 is revised as follows:
  - (b) One (1) continuous vulcanization extrusion department consisting of **7 8** individual process lines, identified as emission units CV 1 through CV 8. Lines CV1, CV3, CV4, CV5, CV6, CV7, and CV8 have a maximum material usage of 159.82 pounds per hour each. Line CV2 has a maximum material usage of 273.97 pounds per hour.
  - (c) One (1) PVC extrusion department consisting of 8 individual process lines, identified as emission units PVC 1 through PVC 8. Each line has a maximum material usage of 14.27 142.7 pounds per hour. Emissions are controlled by an air filtering system which contains both particulate and activated carbon filters with an overall control efficiency of 66%.

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(3) The facility description in Section D.2 is revised as follows:

One (1) continuous vulcanization extrusion department consisting of **7 8** individual process lines, identified as emission units CV1 through CV8. Lines CV1, CV3, CV4, CV5, CV6, CV7, and CV8 have a maximum material usage of 159.82 pounds per hour each. Line CV2 has a maximum material usage of 273.97 pounds per hour.

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(4) The facility description in Section D.3 is revised as follows:

One (1) PVC extrusion department consisting of 8 individual process lines, identified as emission units PVC 1 through PVC 8. Each line has a maximum material usage of 14.27 142.7 pounds per hour. Emissions are controlled by an air filtering system which contains both particulate and activated carbon filters with an overall control efficiency of 66%. Emissions are vented inside the building.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Rachel Meredith, at (800) 451-6027, press 0 and ask for Rachel Meredith or extension 3-5691, or dial (317) 233-5691.

Sincerely,

Paul Dubenetzky, Chief Permits Branch Office of Air Management

RLM

cc: File - Orange County
U.S. EPA, Region V
Orange County Health Department
Southwest Regional Office
Air Compliance Section Inspector - Gene Kelso
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

# PART 70 OPERATING PERMIT OFFICE OF AIR MANAGEMENT

### Essex Group, Inc. 190 East Polk Street Orleans, Indiana 47452

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T117-6923-00013	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: February 9, 1999

First Administrative Amendment 117-11109	Pages Affected 5 and 30
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: July 22, 1999

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Second Administrative Amendment 117-11349	Pages Affected 1a, 5, 6, 28 and 29
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: October 28, 1999

Third Administrative Amendment 117-11532	Pages Affected 1a, 5, 6, 28, and 29
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

Third Administrative Amendment No. 117-11532-00013
Amendment Reviewer: Rachel Meredith

Orleans, Indiana Permit Reviewer: Karen Purtell

Essex Group, Inc.

**SECTION A** 

#### **SOURCE SUMMARY**

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and manufacturers PVC primary wire, thermoset primary wire, ignition wire, battery cable and machine tool wire.

Responsible Official: Tom Harrell

Source Address: 190 East Polk Street, P.O. Box 127, Orleans, Indiana 47452 Mailing Address: 190 East Polk Street, P.O. Box 127, Orleans, Indiana 47452

SIC Code: 3357 County Location: Orange

County Status: Attainment for all criteria pollutants

Source Status: Part 70 Permit Program

Minor Source, under PSD Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (1) One (1) automotive ignition wire auxiliary department consisting of two (2) process lines. Process line one, identified as aux 1, manufactures wire wound ignition core with a maximum production rate of 300 feet per minute. Process line two, identified as aux 2, manufactures glass core ignition wire with a maximum production rate of 300 feet per minute. Emissions from Aux 1 are exhausted through vents number ST1 through ST6. Emissions from Aux 2 are exhausted through stack GS/OV.
- One (1) natural gas fired boiler rated at 21.2 MMBtu per hour of heat input, identified as emission unit CB 1 and one (1) natural gas fired boiler rated at 10 MMBtu per hour of heat input, identified as emission unit Clay-S.

## A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined by 326 IAC 2-7-1(21):

- (a) The following equipment related to manufacturing activities not resulting in the emission of HAPs; brazing equipment, cutting torches, soldering equipment, welding equipment.
- (b) One (1) continuous vulcanization extrusion department consisting of 8 individual process lines, identified as emission units CV 1 through CV 8. Lines CV1, CV3, CV4, CV5, CV6,

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CV7, and CV8 have a maximum material usage of 159.82 pounds per hour each. Line CV2 has a maximum material usage of 273.97 pounds per hour.

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(c) One (1) PVC extrusion department consisting of 8 individual process lines, identified as emission units PVC 1 through PVC 8. Each line has a maximum material usage of 142.7 pounds per hour. Emissions are controlled by an air filtering system which contains both particulate and activated carbon filters with an overall control efficiency of 66%. Emissions are vented inside the building.

#### A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

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#### **SECTION D.2**

#### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

One (1) continuous vulcanization extrusion department consisting of 8 individual process lines, identified as emission units CV 1 through CV 8. Lines CV1, CV3, CV4, CV5, CV6, CV7, and CV8 have a maximum material usage of 159.82 pounds per hour each. Line CV2 has a maximum material usage of 273.97 pounds per hour.

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Particulate Matter (PM) [326 IAC 6-3]

- (a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the continuous vulcanization extrusion lines 1, 3, 4, 5, 6, 7, and 8 shall not exceed 0.75 pounds per hour each when operating at a process weight rate of 159.82 pounds per hour.
- (b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the continuous vulcanization extrusion line number 2, shall not exceed 1.09 pounds per hour when operating at a process weight rate of 273.97 pounds per hour.

The pounds per hour limitations were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E =rate of emission in pounds per hour; and P =process weight rate in tons per hour

#### D.2.2 Volatile Organic Compound (VOC)

Any change or modification which may increase potential emissions from the continuous vulcanization extrusion department shall require prior approval from the OAM to determine applicability requirements of 326 IAC 8, before such change may occur.

#### D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

#### **Compliance Determination Requirements**

#### D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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**SECTION D.3** 

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FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

One (1) PVC extrusion department consisting of 8 individual process lines, identified as emission units PVC 1 through PVC 8. Each line has a maximum material usage of 142.7 pounds per hour. Emissions are controlled by an air filtering system which contains both particulate and activated carbon filters with an overall control efficiency of 66%. Emissions are vented inside the building.

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.3.1 Volatile Organic Compound (VOC)

Any change or modification which may increase potential emissions from the PVC extrusion department shall require prior approval from the OAM to determine applicability requirements of 326 IAC 8, before such change may occur.

#### D.3.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the PM from the PVC extrusion department shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

#### D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.

#### **Compliance Determination Requirements**

#### D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.3.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.